EP 049304

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WPI Acc No: 1982-E4424E/ 198216
Temp. compensator for inductive distance measuring equipment - derives correction signal from constant DC applied to detection coil
Patent Assignee: MICRO-EPSILON MESST (MICR-N)
Inventor: HRUBES F
Number of Countries: 011 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 49304	A	19820414	EP 80106092	A	19801007	198216	B
EP 49304	B	19850529				198522	
DE 3070705	G	19850704				198528	

Priority Applications (No Type Date): EP 80106092 A 19801007
Patent Details:
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Designated States (Regional): AT BE CH DE FR GB IT LI LU NL SE
Abstract (Basic): EP 49304 A

The inductive detection coil forms part of a resonant circuit whose change in frequency describes the distance of an approaching object. A d.c. (or LF) signal of constant current is derived from the detection coil in addition to the changing induced signal with varying current. The constant-current signal is used to correct the varying-current signal. The detection coil is connected to an hf ac oscillator and to a d.c. (or LF) supply. A low pass filter blocks the HF signal and allows the d.c. signal to pass to a correction circuit.

The composite signal (dc + HF) from the coil passes to a processor. The correction signal produced by the correction circuit is added to the output of the processor. An output signal describing the temp. of the coil can be taken from the low pass filter's output. A second processor combines the low pass filter's output with the adder's output to give an output signal corrected by the temp. of the object approaching the coil. The advantage lies in eliminating errors in distance measurement introduced by temp. changes without requiring extra components.

Abstract (Equivalent): EP 49304 B

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